

## **REMARKS**

Reconsideration of this application, as amended, is respectfully requested. Claims 1, 11 and 20 have been amended to clarify that each of the multi-dimensional parameters has multiple constituent sub-parameters of more than one value and that the multiple constituent sub-parameters of each multi-dimensional parameter of the data values are mapped to respective one-dimensional parameters having a single sub-parameter by which the multi-dimensional parameters will now be represented. Support for these amendments may be found in the specification as filed, for example at paragraph 18. No new matter has been added.

Typographical errors in claims 5 and 15 have been corrected.

The rejection for obviousness-type double patenting in view of co-pending application 10/851,276 is noted. Should the claims, as amended, be found allowable but for such obviousness-type double patenting an appropriate terminal disclaimer will be filed.

The present claims are patentable over Lim, US 5,339,164, even when considered in view of Sah, US 2003/0028509 and/or Uchibayashi, US 2003/0133169.

Lim describes an image encoding scheme in which quantization is used to reduce the number of bits needed to describe a data value. See, Lim at col. 4, ll. 2-34. As noted by Lim (and cited the Office Action), quantization is a many-to-one process. However, such quantization is not equivalent to the presently claimed process in which multi-dimensional parameters of data values each have multiple constituent sub-parameters of more than one value and in which the multiple sub-parameters are mapped to respective one-dimensional parameters having single sub-parameters.

Instead, quantization is a process in which information content of a parameter is reduced by artificially forcing a first range of values describing that parameter to a fewer number of such values. See, Lim at col. 4, ll. 2-9. The “space” defining that parameter is not, however, altered. It is merely made less distinct by reducing the number of individual bits used to describe that space.

Such quantization then is distinctly different than the processes presently claimed. Stated differently, while Lim may be said to describe a process in which the number of bits describing

values of parameters are reduced (but leaving the dimensionality of such parameters unchanged), the present invention changes the dimensional representations of parameters.

Adding the teachings of Sah and/or Uchibayashi to those of Lim does not cure this deficiency. Sah is cited for describing a run length encoding process in which redundant data values share common table entries. Even if true, however, the above-cited deficiencies would still be present in the combination of the references. Hence, the claims are patentable over the combination of Lim and Sah.

Uchibayashi is cited for describing data values having parameter values that are similar to one another within a tolerance range. Even if true, however, the above-cited deficiencies would still be present in the combination of the references. Hence, the claims are patentable over the combination of Lim, Sah and Uchibayashi .

If there are any additional fees due in connection with this communication, please charge Deposit Account No. 19-3140.

Respectfully submitted,  
SONNENSCHNEIDER NATH & ROSENTHAL LLP

Dated: August 10, 2006

/Tarek N. Fahmi/  
Tarek N. Fahmi  
Reg. No. 41,402

P.O. Box 061080  
Wacker Drive Station  
Sears Tower  
Chicago, IL 60606-1080  
(415) 882-5023